

cell differentiation enhancer, and the second group directed to the methods of using these compositions in treating specified skin conditions. Each group of claims must be treated separately in terms of determining their patentability.

With respect to the composition claims, it is the Examiner's position that it would be obvious to combine these two types of active compounds, based on the fact that the prior art suggests that one example of each of these classes of compounds, namely the protease inhibitor betulinic acid, and the cell differentiation enhancer Vitamin D, are each known, individually, for the treatment of melanoma, "in the absence of unexpected results". It is believed, however, that Applicants have shown unexpected results in the combination of these two materials. Neither of these two compounds has previously been disclosed individually to have any effect on skin lipid barrier repair. Thus, the fact that in combination they do exhibit this beneficial effect is quite surprising and unexpected. This benefit is in no way suggested by the prior art. Neither of the references suggests the combination with the other, nor do they suggest that any benefit could be obtained thereby. Even if, as the examiner suggests, it would be obvious to combine them simply because they are both aimed at achieving the same purpose, there would be nothing to suggest that an enhancement of any type of activity could be achieved by the combination of the two materials, whether it be treatment of melanoma or treatment of skin conditions relating to an insufficient lipid barrier. Thus, the combination of these two components does produce the unexpected results solicited by the Examiner, thereby overcoming any *prima facie* case of obviousness, and for this reason, the rejected composition claims are allowable over the prior art.

With respect to the method claims, even if the rejection of the composition claims were to be maintained, the method claims must clearly be considered unobvious. The Examiner has noted that both of the cited references teach the use of the respective compounds in the treatment of melanoma. In contrast, the method claims of the present invention are directed to specific uses related to conditions associated with a compromised or inadequate lipid barrier. Claim 17 and 18 for example relate to a method of treatment or prevention of dry skin. Claims 20 and 21 relate to a method for reducing or preventing the skin's reaction to irritants or sensitizers. Claims 23, 24 and 26 relate to a method for protecting the skin against the effects of UV exposure. Claims 27 and 28 relate to a method of tanning the skin without exposure to the sun. None of these methods is even remotely suggested in either DasGupta or Dijkstra. Nor would these methods be inherently achieved by the application of either betulinic acid or Vitamin D, or a combination thereof, to the skin to treat melanoma. The cited prior art is for the treatment of a very specific and focused condition. To the extent there is any disclosure of how the materials should be applied (and there is none in the Dijkstra document provided, other than to say "topically") it is suggested to apply the compound directly to the tumor. This application would not necessarily, or even likely, result in the treatment of dry skin, the prevention of irritation, the prevention

of the effects of UV radiation, and certainly not the sunless tanning of skin, because the condition to be treated may not exist at the point of application to a melanoma. In other words, the mere suggestion that either or both of these compounds can be applied to the skin for the very specific purpose of treating a skin tumor cannot reasonably be said to teach or suggest its application to dry skin, to irritated skin, to skin exposed to UV radiation, or to skin to be tanned in the absence of the sun. The latter use is particularly not suggested, since achievement of this end requires the presence of a self-tanning compound in the composition, and there is absolutely no disclosure of this type of compound in either of the cited references. Thus, the method claims of the present application, even in their broadest embodiments, are not taught or suggested anywhere in the cited references. If the Examiner maintains the rejection of these method claims, Applicants respectfully request that it be expressly shown where, in the combined teachings of DasGupta and Dijkstra, it is suggested to apply the combination of a protease inhibitor and a cell differentiation enhancer to treat dry skin, to prevent irritation, to protect against UV radiation or to assist in self-tanning. In the absence of such showing in the prior art, the obviousness rejection of the method claims cannot be maintained.

Applicants note with appreciation the Examiner's recognition of allowable subject matter in certain of the claims. However, as shown above, it is believed that the subject matter of all the present claims is allowable. Reconsideration and withdrawal of the rejection of the claims is therefore respectfully requested.

#### CONCLUSION

The present claims are believed to be in condition for allowance, and prompt issuance of a Notice of Allowance is respectfully solicited. The Examiner is encouraged to contact the undersigned by telephone if it is believed that discussion will resolve any outstanding issues.

Respectfully submitted,

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